

REMARKS

Applicants have reviewed the decision of the Board of Patent Appeals and Interferences dated October 31, 2008, and wish to continue the prosecution of this application in view of further amendments to the claims that place them in condition for allowance.

Patentability of Claim 1 Over Peil

Claims 1 and 4 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Peil (U.S. Patent No. 4,877,217). Claim 4 has been canceled, thus rendering the rejection of this claim moot.

As to Claim 1, the first issue considered by the Board under this rejection was whether each seal 30 and 32 in Peil is structurally configured to perform different active sealing functions against different fluids in different directions. The Board quoted Peil at Col. 2, lines 33–37, which state that "[a] first seal 30 and a second seal 32 . . . prevent flow or leaks of the well fluid from the ram bore 14 or of hydraulic fluid from the chamber 24," and concluded that each seal performs the same sealing function.

Applicants have amended Claim 1 to recite "the second circumferential seal on each side being isolated from fluids to be sealed against such that the second circumferential seal only serves an active sealing function upon failure of the first circumferential seal." The amended language of Claim 1 is supported by the present application and distinguishes the claim from the teachings of Peil. It is clear from the disclosure of Peil that at all times both circumferential seals of Peil are performing a sealing function.

First, both seal 30 and 32 in Peil actively seal against well fluid on the ram bore side and hydraulic fluid on the chamber side. In contrast, the second circumferential seal of the present application is isolated from fluids on each side. Peil simply does not teach or suggest this feature of Claim 1.

Second, both seals 30 and 32 in Peil actively seal against either well fluid or hydraulic fluid, regardless of whether the other has failed. In contrast, the second circumferential seal of

the present application serves only an active sealing function upon failure of the circumferential seal. Peil neither teaches nor suggests this feature of Claim 1.

The second issue considered by the Board under this rejection is when one seal 30, 32 fails, well fluids flow out of a leak indicator port 34 instead of flowing to the other seal 30, 32. The Board found that applicants' argument failed since there was nothing that prevented a portion of the fluid to continue on to the non-defective seal. It is clear from the disclosure of Peil that at least a portion of the fluids flow out of the leak indicator port. Applicants have therefore amended Claim 1 to recite "the second circumferential seal being positioned to contain all fluids within the blowout preventer body." Peil does not teach or suggest this feature.

Applicants also argued that ram shaft 26 does not extend from preventer body 10 in Peil. The Board stated that, with respect to Peil, "Appellant is correct that ram shaft 26 does not extend from preventer body 10." However, the Board held that, since ram shaft 26 extended from housing 20, the element was still taught by Peil. In view of the difference noted by the Board, applicants have amended Claim 1 such that it now recites a ram shaft that moves "between a fully extended position extending from a blowout preventer body and a fully retracted position retracted within the blowout preventer body."

In light of the above amendments and arguments, applicants submit that Claim 1 is not anticipated by Peil.

Patentability of Claim 1 Over Rasmussen

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Rasmussen (U.S. Patent No. 4,877,217).

The Board rejected applicants' argument that packers 85, 115 of Rasmussen do not perform a dedicated sealing function. The Board noted that Claim 1 did not require the seals to always be in sealing contact with the ram. Accordingly, applicants have amended Claim 1 to recite "a first seal travel area which is in continuous sealing contact with the first seal."

Moreover, applicants have also noted the Board's finding that casing 260 is capable of being moved limited distances so as to have the claimed seal travel areas. Applicants have therefore amended Claim 1 to define the first seal travel area and the second travel area in terms of a "fully extended position" and a "fully retracted position." Applicants submit that a fully extended position and fully retracted position for Rasmussen requires packers 85, 115 to overlap the area covered along the casing. As Rasmussen specifically acknowledges, the packers 85, 115 are incapable of remaining in contact with the casing while the casing moves between a fully extended and fully retracted position. Rasmussen therefore does not anticipate Claim 1 of the present application.

In light of the above amendments and arguments, applicants submit that Claim 1 is patentable over Rasmussen.

Patentability of Claim 3 Over Rasmussen and Thompson

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rasmussen in view of Thompson (U.S. Patent No. 3,987,846). Applicants respectfully traverse the rejection.

Applicants have amended Claim 1 and have shown that Rasmussen does not teach every feature of Claim 1. Applicants submit that Thompson does not make up the deficiencies of Rasmussen, and therefore Claim 3, which depends upon Claim 1, is patentable over Rasmussen in view of Thompson. Applicants further submit that Claim 3 is patentable for the additional subject matter it recites.

CONCLUSION

In view of the foregoing amendments and arguments, it is respectfully submitted that the present application is in condition for allowance. Applicants therefore request the early issuance of a Notice of Allowance.

Respectfully submitted,

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